CALIFORNIA
OIL WORLD

PUBLISHED TWICE A MONTH

2404 WEST 7th ST.
LOS ANGELES 57, CALIFORNIA

PETROLEUM PUBLISHERS, INC.
W. C. MONROE—President and Editor
KINZIE MILLER—Vice President
LARRY O. MILLER, Advertising Manager
RICHARD SNEDDON, Contributing Editor

FRED JONES, Chicago Manager
228 No. La Salle St., Chicago 1, Ill.
HOWARD F. McCLENAHAN—Cleveland Manager
402-1010 Euclid Bldg., Cleveland 15, Ohio
The McKeown Company—New York Representatives
342 Madison Avenue, New York, N. Y.

AUDITED PAID CIRCULATION ABC

• SECOND ISSUE
SEPTEMBER, 1954
VOL. 47 • NO. 18
WHOLE NO. 1904

California Oil World is published twice a month at 2404 West 7th St., Los Angeles 57, California. Entered as Second-Class Matter, April 29th, 1944, at the post office at Los Angeles, California, under the Act of March 3, 1879. Subscription price $1 per year in U. S. and possessions, $2 in foreign countries including Canada.

Telephone DUnkirk 2-6218
September 30th, 1954

A.I.M.E. Fall Meeting Features Papers, Exhibits

Outstanding technical papers and a series of industrial exhibits will provide the main features of the annual Fall Meeting of the Pacific Petroleum Chapter, A.I.M.E., in conjunction with the Mining and Metals Branches, Thursday and Friday, October 7 and 8, at the Biltmore Hotel, Los Angeles. A dinner-dance on Friday evening will round out the affair.

Several hundred petroleum, mining, and metallurgical engineers are expected to attend the two-day session, along with many students and industrialists from related lines of business.

Fall Meeting chairman of the host Petroleum Chapter is Howard Pyle of the Monterey Oil Co. with H. M. Stanier of Sunray Oil Corporation as vice-chairman. Petroleum technical chairman is R. S. Crog of the Union Oil Co. Research Center. Meeting chairman of the Metals Branch is Kimball W. Funk of Aerojet General Corporation. Meeting chairman of the Mining Branch is Bill Crutchfield of the Santa Fe Railway Co. assisted by D. D. Dyrsmid of the Dicalite Division of Great Lakes Carbon Co.

The complete program follows:

PETROLEUM CHAPTER

Thursday, October 7

8:30 a.m. to 5:00 p.m.—REGISTRATION AND EXHIBITS
Lobby, Biltmore Hotel Ballroom

9:15 a.m. to 11:30 a.m.—FORMATION EVALUATION — Biltmore Hotel Ballroom

"Radioactive Tracers in Oil Production Problems," by Allen H. Flagg, J. P. Myers, J. L. P. Campbell, and J. M. Terry, Lane-Wells Co., and E. S. Mardock, Well Surveys, Inc.

"The Contribution of Clays to Formation Resistivity Based Upon Laboratory Measurements on Clay Suspensions," by G. H. Smith and E. R. Atkins, Jr., Union Oil Co.

12:00 N.—PACIFIC PETROLEUM CHAPTER LUNCHEON
Speaker, John R. McMillan, Fullerton Oil Co., Chairman, Petroleum Branch, A.I.M.E.

2:00 p.m. to 5:00 p.m.—DRAIN HOLE DRILLING—Biltmore Hotel Ballroom

"The Theory, Application, and Mechanics of Drain Hole Drilling," by C. Wm. Zublin, Universal Engineering Co.

"Well Productivity Increase from Drain Holes as Measured by Model Studies," by R. L. Perrine, California Research Corporation.

Panel Discussion on Drain Hole Drilling.

Friday, October 8

8:30 a.m. to 5:00 p.m.—REGISTRATION AND EXHIBITS—Biltmore Hotel Ballroom

9:00 a.m. to 11:30 a.m.—FLUID INJECTION — Biltmore Hotel Ballroom

"Pressure Maintenance by Water Injection in the Shannon Reservoir, Cole Creek Field, Wyoming," by C. F. Gates, General Petroleum Corporation, and G. G. Brown, Socony Vacuum Oil Co., Pegasus Division.

"Oil Recovery Performance of Pattern Gas or Water Injection Operations from Model Tests," by F. F. Craig, T. M. Geffen and R. A. Morse, Stanolind Oil and Gas Co.

"Analysis of Pressure Fall-Off Curves Obtained in Water Injection Wells to Determine Injective Capacity and Formation Damage," by T. J. Nowak and G. Lester, Union Oil Co. of Calif.

"Canal Field Gas Injection Project," by C. J. Pings, Jr. and W. Tempelaar Lietz, Shell Oil Co.

12:00 N.—SOUTHERN CALIFORNIA SECTION LUNCHEON

"Super Conductors," by Dr. Richard P. Feynman, California Institute of Technology.

2:00 p.m.—ENGINEERING MANAGEMENT — Biltmore Hotel Ballroom

"'Idea' Communication in Industry," by E. A. Hartsook, Standard Oil Co. of California.

2:45 p.m. to 3:00 p.m.—BUSINESS MEETING

3:00 p.m. to 4:30 p.m.—OIL FIELD PERFORMANCE — Biltmore Hotel Ballroom

"Analysis of Reservoir Performance K_g/K_o Curves and a Laboratory K_g/K_o curve Measured on a Core Sample," by T. D. Mueller, J. E. Warren, and W. J. West, California Research Corporation.

"Report of Operations, Naval Petroleum Reserve No. 1, Elk Hills, 1945-1954," by Commander F. W. Gooch, Jr., USN, and R. H. Adams, Standard Oil Co. of California.

7:30 p.m.—PACIFIC PETROLEUM CHAPTER DINNER DANCE—Biltmore Hotel Renaissance Room.

MINING BRANCH

The final order of papers and their place of presentation in the Biltmore Hotel has not been established at the time of going to press.

"Advances in Instrumentation for the Mining Industry," by Kenneth Kendall, Beckman Instruments, Inc.

Modern analytical instruments save time and money in mining as they do in other industries. For this reason, increase in instrumentation is certain in an advancing mineral industry.

"Best Conveyor Systems in Mining," by Clay Colley, Consulting Engineer, Los Angeles.

A graphic description of some of the larger belt conveyor installations and types of belts that are used. The author covers such practical items as the life of belts, methods of guiding belts, and several basic types of conveyor idlers.

"Notes on Sampling and Evaluation of Mineral Deposits," by G. Austin Schroter, Consulting Mining Engineer and Geologist, Los Angeles, California.

A review of methods and costs of some unique sampling and evaluation methods for minerals occurring in liquid, solid, and vapor phase. Illustrated with slides.

"Radioactive Deposits of California," by Hal G. Stephens, Geologist, U. S. Bureau of Mines.

"Developing a New Mining Method at the Crestmore Mine," by R. H. Wightman, Superintendent of Mining, Riverside Cement Co.

"The Importance of New Methods of Recovering Sulphur," by Benjamin M. Holt, James H. Jensen, James W. Klohr, Ralph M. Parsons Co.

The rapidly increasing use of sulfur in the modern industrial economy points up the continuing need for evaluating new methods of sulfur recovery. This paper surveys sulfur markets, sources, and recovery processes.

METALS BRANCH

Thursday, October 7

2:00 p.m.—"Fundamental Aspects of the Plastic Properties of Metal," by Dr. Earl R. Parker, Professor of Metallurgy, University of California at Berkeley.

Friday, October 8

2:00 p.m.—PANEL DISCUSSION "Fundamental Aspects of the Plastic Properties of Metal."

Some Economic Aspects of the Oil Storage-Tank Failure Problem

By F. A. Gitzendanner

Oil storage-tank failures have economic aspects which are important to the petroleum industry. This paper will discuss several of them.

The use of cylindrical steel storage tanks is standard in the petroleum industry. The costs associated with their use, whether specifically identified or not, are included in over-all costs of operation. Proposed technological changes must be evaluated by weighing their costs against present costs.

Failure Risk Cost Unknown

Construction costs of conventional tankage are well known. Operating costs, including fire-insurance cost, are also well known. Costs associated with the risk of failure are not known. An estimate of those costs will be made. The costs of several proposals for reducing risk of failure will be discussed.

Only failures attributed to design, workmanship, or material used are considered. These factors may be considered as inherent in the structure itself. Foundation failure, failures from fire, explosion, impact by missiles, or similar obvious external causes are not included.

32 Failures in 110,000 Tank-Years of Service

A survey just completed of the refining portion of the U.S. petroleum industry[1a] shows that there were 5,950 tanks of 55,000-bbl. capacity or larger in service in the industry in 1953. If we assume that the number in service each year was proportional to the refining capacity of the industry in the respective years, an estimate of the number in service each year can be made. Multiplying the number of tanks in service each year by the number of years they are in service gives a total of 110,000 tank-years of service developed over the past 30 years. It was the consensus of the survey that 30 years is a reasonable estimate of the average life of a tank.

The industry survey reported 32 tank failures in the United States. One of the failures was in 1918 and the remainder within the past 30 years. This is a failure rate of 1 failure per 3,400 tank-years of service.

The survey also disclosed that 26 of the reported failures were of tanks constructed prior to 1925. The other 6 were failures of welded tanks constructed since 1940. Tanks constructed since 1940 have developed approximately 15,000 tank-years of service to date. Although 6 failures in this group suggest a higher failure rate for tanks constructed since 1940, a statistical analysis shows that the difference is within the range of random variations which are typical of this problem.

The failure record exhibits some interesting statistical characteristics. There is a statistical prediction technique (called the Poisson distribution) which can be applied to the tank-failure problem. It utilizes the fact of 32 failures in 30 years and probability principles which reflect the fact that there are a great many opportunities for the unique circum-

GLOBE

"2-Cutter" Integral Jet ROCK BIT

USED EXCLUSIVELY ON RECORD BREAKING* RUNS!

Globe 2-Cutter Integral Jet Rock Bits blast formation and tear it out in record time...helping to keep drilling costs down to absolute minimum. They're a "big hit" everywhere!

• Recently, a Southern Louisiana rig established a world's record in digging 5,091 feet of 9⅞" hole in 31 hours with one bit. Another rig made 4,004 feet of 9⅞" hole in 17 hours.

Globe 2-Cutter Integral Jet Rock Bits are made for all type formations and are available in most popular sizes.

GLOBE
OIL TOOLS COMPANY
GLOBE
OIL TOOLS
Serving the Petroleum Industry

Branches in All Principal Areas. Refer to Your Classified Telephone Directory for Your Nearest Globe Branch.

Main Office and Plant: LOS NIETOS, CALIFORNIA

stances to exist which cause failure and small likelihood for any particular set of them to occur.

Table 1 summarizes the results of applying the Poisson distribution to this problem.

The close correlation between predicted failures and actual ones strongly suggests that there is a strong element of chance involved in this problem.

The survey also reported 1 failure in Canada among 329 tanks which have developed 5,600 tank-years of service. This failure rate is also well within the random variation encountered in this problem. It further strengthens confidence that a failure rate of 1 failure per 3,400 tank-years of service is a reasonable estimate.

This failure rate can be expressed in various ways: i.e., 0.88 per cent (per year), 1 failure in 30 years per group of 114 tanks, 1 failure per year per group of 3,400 tanks, or slightly less than 2 failures per year for the U.S. refining industry. The latter may sound startling in view of the 32 reported failures over the past 30 years. During that period, however, the number of tanks in service has trebled. This is reflected in the current rate.

No matter how expressed, this failure rate is high when compared to common engineering structures. As a comparison, consider for a moment building failures. In greater Houston there are approximately 250,000 buildings of all descriptions. At the rate of 1 failure per 3,400 building-years of service, 3 failures in 2 weeks would occur. Building failures of a seriousness to present any hazard to life and property do not approach this level by wide margins.

TABLE 1
Poisson Distribution Prediction of Tank Failures

Number of Failures in Any One Year	Number of Years in Which There Were That Many Failures	
	Predicted	Actual
0	14.0	14
1	12.8	13
2	5.9	6
3	1.8	1
4	.4	1
5 or more	.16	0

The number of occurrences is not the only way, however, of considering failures. The seriousness of the individual failures is an even more important criterion.

Loss Per Failure—$90,000

Twenty-three of the 32 reported failures were partial ones and stopped at varying degrees short of complete collapse. Fires occurred in very few of the cases. In several instances a substantial portion of the spilled oil was actually recovered. The industry survey reported money losses for 17 of the 32 failures. The average loss per failure reported was $90,000.

The low average reported loss results primarily from the fact that a failure of tank steel rarely results in the complete collapse of a tank. This suggests that this whole subject may more properly be discussed as the brittle failure of tank steel rather than as the failure of oil storage tanks. The fact that steel used in pressure piping suffers from certain undesirable characteristics which are not completely understood alarms no one, whereas thinking of oil storage tanks bursting is likely to engender great concern.

Converting loss data to insurance premiums is a convenient way of putting them into economic terms which are understandable and useful. The refining-industry survey revealed no tendency for the larger tanks to fail more frequently or for their failures to be more costly. It seems reasonable to consider any brittle failure as a failure, regardless of where the crack stops, reasoning that we have absolutely no information as to where it will stop or as to a method for influencing it. It therefore seems reasonable, particularly as only tanks of 55,000-bbl. capacity and larger are being considered, for losses to be averaged over the number of failures.

$60-Loss Insurance Premium

Assuming a loss of $100,000 per failure, an insurance premium of $60 per year per tank would be required. This premium provides for a 50-per-cent loss ratio (losses to premiums) which is common in this type of insurance. By way of comparison we note that $100,000 worth of straight fire insurance coverage on this tank would cost $220 per year. The fire insurance covers the tank-failure loss if a fire occurs—it would not cover the bulk of reported tank failures where no fire occurred. The $60 per tank per year indicated covers the risk of failure alone. Although the $100,000 coverage is the same for both the brittle-failure loss and the fire loss, it might be argued that the 2 figures are not exactly comparable. The $100,000 coverage against brittle failure covers the complete loss risk, whereas the fire coverage covers only a $100,000 loss. Unfortunately, no data were available as to average fire losses for the average large tank fire. It appears that the premium costs for the two equal coverages are a reasonable measure of the relative risks.

There is no general concern about the fire hazard of large storage tanks. The considerably smaller risk of brittle failure does not warrant even greater concern.

Progress Vs. Risk

However, the fact that a risk is small is no basis for not trying to decrease it still further. The petroleum industry is built on the foundation stone that human life will not be sacrificed to industrial profit. Any specific proposed improvement and its cost must be judged against this background even more than against economics. At the same time, the inherent propensity of humans to take chances must be recognized. Air travel would not be a reality if zero risk were a requirement. Progress involves risk.

Larger Individual Tanks Economical

Let us consider some of the methods proposed for reducing brittle failure of tanks. One of the methods is to limit tank capacity. Some refiners will not use 150,000-bbl. capacity and larger tanks entirely for structural reasons.

From the cost standpoint the following data are pertinent. A complete installation of three 160,000-bbl. floating-roof tanks costs 26 per cent ($240,000) less than an installation of six 80,000-bbl. tanks (Table 2). In this case a refiner tacitly assumes the insurance cost as well as the construction cost, whether he specifically buys the insurance or not. As a matter of fact, tank-collapse insurance is not written by any insurance company and the refiner is forced to be a self-insurer. Self-insuring, however, is common in the petroleum industry. It only remains to calculate the insurance

cost so that sound comparisons between various alternatives can be made.

In analyses involving capital construction costs and annual costs like insurance premiums, it is convenient to reduce the annual costs to an equivalent lump sum payable at the beginning of the period. For the insurance costs, this amount corresponds to the lump-sum cost of single premium life insurance which is familiar to many. To determine the equivalent lump sum, the life of an average tank must be known. The structural life of a tank is difficult to ascertain. During its life it is subject to dismantling, fire, abandonment, replacement, and failure. However, the consensus of the industry survey[1] is that 30 years is a reasonable estimate of the average life of a tank.

In the case of the single-premium life-insurance policy, the insurance company invests the initial payment. The earnings on it plus a portion of the original amount are used to pay the annual cost of insurance. The insurance company earns approximately 2 per cent to 3 per cent per year from the relatively conservative investments which it makes.

An oil company as a self-insurer is justified in calculating earnings at the rate of 15 per cent per year on the amounts tacitly committed to its insurance fund.[2] The fund is actually productively used in its normal business. Fifteen per cent is the average earning rate on funds, both equity and debt, invested in the petroleum industry.

A sum of $394 invested at 15 per cent will produce 30 annual payments of $60. The $394 from the income-tax standpoint, however, is not the same kind of thing as the original cost of the tank. When the annual insurance cost is written off as expense, it has the effect of reducing income taxes by one-half of the amount of the expense. This reduction in income taxes, plus the portion from the insurance fund, together with the 15-per-cent earnings on it, can be used to pay the annual insurance cost. A sum of $220, instead of the $394 described, at 15 per cent, together with the income tax reduction, will provide for the insurance cost. This reflects the petroleum industry's 15-per-cent average earnings, the 30-year average tank life, a 50-percent income-tax rate, and the difference in tax effect of expense money and investment money.

If all of the construction savings for the 480,000-bbl. installation described were devoted to paying insurance costs, the savings on the installation of three 160,000-bbl. tanks would pay for 366 times the risk of the six 80,000-bbl. tank installations.

Although intuition suggests that the larger tanks are more hazardous, the industry survey did not indicate this to be the case. Fire-insurance rates increase 50-per cent for tanks over 150,000-bbl. capacity. The information available to us, however, suggests that there are no extensive data available relative to this large change in rates at that capacity.

The indication clearly seems to be that the use of larger-capacity individual tanks is the economical course.

Lower Shell Insulation

The use of 2 in. of insulation over the lower 12 ft. of shell has some merit in decreasing risk of brittle failure. Insulation decreases thermal gradient stresses which result from changes in atmospheric temperatures. Many of the failures reported in the survey seem to have been associated with considerable atmospheric temperature change. The bottom tank ring is the heaviest plate. It is constrained by the tank bottom at the lower edge. It has practically all of the discontinuities associated with manholes, connections, and the like. Insulation of the lower 12 ft. would throw the thermal gradient stresses into the upper part of the second ring. This is a much simpler structure and has lower unit stresses as well.

Three 160,000-bbl. tanks with insulation on the lower 12 ft. of shell would cost 22 per cent ($212,000) less than 6 uninsulated 80,000-bbl. tanks. It costs approximately $6,800 to insulate an 80,000-bbl. tank. Three insulated 160,000-bbl. tanks would cost 27 per cent ($252,000) less than 6 insulated 80,000-bbl. tanks.

Insulating the lower 12 ft. of large tank shells costs money, but the amount may not be prohibitive if engineering considerations support the merit of the change. Short of the engineering conclusion that insulation is a "must" for smaller tanks and that the use of larger tanks is not permissible, the use of larger individual tanks with insulated shells is also the most economical course.

Decreasing Design Stress

Reducing allowable design stresses to the order of one-half the present API Std. 12C allowables is a possible alternative. This is considered a step in the direction of reducing risk. Heavier welds, increased rigidity, and the characteristics of the plate itself, however, are considerations which complicate the picture. A conventional 80,000-bbl. cone-roof tank with shell plate thicknesses approximately double the present Std. 12C allowables would cost approximately 45 per cent ($26,000) more than a Std. 12C tank (or 70 cents per barrel to $1.03 per barrel).

Underground Tankage

The presently known ultimate in reduction of risk is probably attained by placing all tanks underground. This is akin to rebuilding all our cities underground for anti-bombing defense. It is effective, but costly.

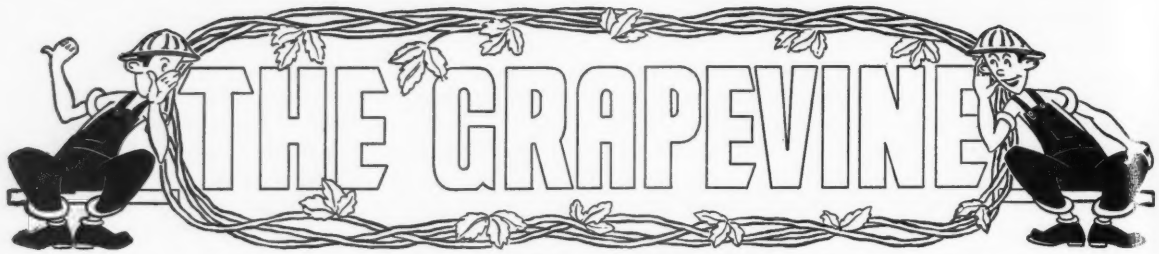
Underground concrete tanks are not unreasonably expensive to con-

(Continued on Page 12)

TABLE 2

Storage Capacity Costs
(480,000 Bbl. Total Capacity)

	Six 80,000 Bbl. Tanks	Three 160,000 Bbl. Tanks
1. Conventional construction floating-roof tanks, foundations, firewalls, piping, and land	$1,160,000.00	$920,000.00
Unit cost, dollars per barrel	2.42	1.93
2. Same as (1), plus 2 in. of insulation on lower 12 ft. of shell	$1,200,000.00	$948,000.00
Unit cost, dollars per barrel	2.50	1.98



By RICHARD SNEDDON

Spots Before Their Eyes

Not long ago we were shanghaied into a domino game with Jim Hughes, the Lane-Wells oratorical whiz, Stan Oatway, the Shell Company vice presidential assistant, and Claude Kirkman, another member of the Lane-Wells upper crust who just came here recently all the way from Oklahoma City to deputize for Jim Hughes. The latter has packed his school books and taken off for Harvard University to absorb that special executive course in business administration. Our partner in the five-multiple melee aforesaid was Claude Kirkman and although we do say so ourself "as hadn't ought," we gave the Hughes-Oatway combo a most awful trouncing. As nearly as we can remember, the sum that changed hands after the debacle was up in the neighborhood of sixty-five cents, and you should have seen the children clap their poor thin little hands and do a ring around the rosy when we arrived home, untied the corner of our handkerchief and let this mess of mazuma cascade out on to the kitchen table.

Harvardians on Increase

Incidentally, there are now quite a number of Harvard alumni sashaying about the derrick groves. In our own acquaintance are Paul Huggins, Western Gulf veep, first president of the Petroleum Club of Los Angeles, and about as loose swinging a southpaw golfer as ever lofted a cubic yard of divot skyward; Roy Johnson, vice president of Republic Supply Company, noted Nineteener, piano dismantler, and one of the founders of that amazing institution, the Jack Daniels' Syndicate; John Neale, president of Lane-Wells Company and a high class citizen by any species of measurement; Ed Hamner, affable area manager for Humble Oil & Refining Company, director of the Petroleum Club of Los Angeles, and a chap who lays down a double-five as daintily as anyone in the western domino circuit; Mort Higgs, Lane-Wells vice president, who hails from the hometown of philosopher, Bob Burns, that is Van Buren, Arkansas, where they try to keep the mosquitoes out with chicken wire but it doesn't do any good because the big ones push the litle ones through and then the little ones go around and open the door for the big ones.

Jim Hughes Off to Harvard

All of these boys, and no doubt many more, romp about in red blazers, disseminate a superfluity of broad a's, display a completely r-less vocabulary, and in general sound like a group of Bostonians at a tea party. Anyway, our best wishes to Jim and we certainly hope that he is graduated CUM LAUDE, or CUM GRANO SALIS or something. And so on to other things: At a recent noontime, with Jay Bush, the noted National Supply Company credit manager who is himself by all means a credit to the entire institution of credit, we kibitzed silently on the fringe of a domino game in which were involved a mighty sharp quartet, to wit, Stan Natcher, Ed Bartosh, Tom Sherman, and Bob Smith. It reminded us that when we were a teenager back in Scotland just before the War of the Roses, the country was hit by an epidemic of "banker" which is the Caledonian substitute for poker. On Saturday afternoons and even on Sundays we boys would gather in small clots or agglutinations in the hayfields, usually about eight or ten of us, and play banker while a lookout on a nearby hill kept watch for the local policeman and received two cents an hour for his services.

The Original Kibitzer

A common bird in these parts was the lapwing, better known in Scotland as the peewit. This bird built its nest on the ground, usually in the hayfields, and whenever we banker players settled down too close to the nest, he would flutter around our heads in an agony of anxiety, meantime voicing indignant protest. We merely mention this because the German for lapwing is **kiebitz** which is where we get our word "kibitzer." Isn't that interesting?

Heigh-ho for Brentwood!

A few Sundays ago we boarded the family hotrod and in no time at all were steaming for Brentwood whence we had been invited by Ted Sterling to join in celebrating the third anniversary of his Castaic oilfield discovery. This was ostensibly arranged for the members of the Oil Club of which Ted is a member, but included quite a few other folk who seemed to fit very snugly into the pattern. Anyway, upon our arrival at the Sterling manor on Canyon View Drive we were greeted by Ted and his very gracious lady, the Richfield Rollin Eckises who did a neat job of co-hosting the party, the consulting Jim Wests who did the same, and the two lovely Sterling daughters and their good looking young husbands, Dick Sawyer and Bill Williams. We arrived at the same moment as the Paul Terrys of Capital Company

You'll do Better with an

H. C. SMITH Hole Opener

6-Point Hole Openers in sizes 8¾" to 28"

3-Point Hole Openers in sizes 10⅝" to 36"

Both are available with either rock bit or bull nose pilots.

—because all sizes of H. C. Smith Hole Openers, from smallest to largest, feature the same advanced construction . . . bodies heat-treated for maximum strength; triple bearings for longer, trouble-free life; cutter teeth hard-faced for fast digging and greatest wear. And they're available in a full range of sizes.

H C Smith
OIL TOOL CO.

BRANCHES IN ALL PRINCIPAL OIL CENTERS IN THE UNITED STATES AND CANADA
GENERAL OFFICES, EXPORT OFFICES AND PLANT: COMPTON, CALIF.
CALIFORNIA BRANCHES: AVENAL • BAKERSFIELD • COMPTON
CUYAMA • NEWHALL • RIO VISTA • SANTA MARIA • VENTURA

fame, and having had a tour of the house under the guidance of Francis Minshall, the Continental nobleman, we shall merely say that the artistic touch of Mrs. Sterling has certainly produced wonderful results.

From O'Brien to Sterling

The house itself and all its appurtenances and accessories is a most intriguing place. It was formerly owned by George O'Brien but it now shows unmistakable evidence of having been acquired by an oil man and one, by the way, particularly partial to big game fishing. There are some beams in the structure that look suspiciously like as if they had once been part of an oil derrick and there are some mighty interesting looking fish hanging here and there. This is the time when we could wish we were writing for Better Homes & Gardens because a whole feature might be written about the manner in which the house has been built and another feature on the exquisite taste with which it has been decorated and furnished.

Come into the Garden, Maud!

But this was supposed to be a garden party, so we barged out into the open and immediately found ourself in about as pretty a home setting as we have seen in a long time. The entire garden constitutes a fair sized bowl and it has been beautifully cultured in a sort of terraced arrangement, a most attractive one, with the swimming pool on a sort of mesa at the far side. We learned accidentally that Ted Bear, the collegiate looking young domino consultant, was the gardener on this estate in his spare moments when he was attending high school in Santa Monica, and if he is responsible even in small degree for the plants, shrubbery, and general display that are there now, he is assuredly to be congratulated.

Natatory Experts and Such

Among those who cavorted gaily in the swimming pool for a considerable portion of the evening, were the Bankline Weismuller, Henry Paulsen, whose diving, acrobatic and otherwise, was near professional stuff; Mrs. Henry Paulsen, a neat back-stroker with lots of speed and fine style; Elmer Rodger, Union Oil Company proponent of the Australian crawl and other species of under-water skullduggery; and Frank Carter, the flying horseman whose portrayals of the Japanese statesman, Saka Manura, are an important part of the Oil Club routine, and whose facility in the aquatic arts is nothing less than stupendous.

The Lufkin Line

$20,000,000 AIN'T HAY

It was indeed a pleasure to be a guest at the recent dedication of **Standard of Cal's** new **$20,000,000 cat cracker at El Segundo.**

Genial Bob Roberts, district chief of public relations for Standard and his assistant, **Bill Murphy,** escorted a bus load of us from the Biltmore Hotel, and shoving off promptly at 9:30 A.M., we headed for El Segundo **via Standard's Baldwin Hills oil field.**

Pleasant recollections are **synonymous** with Baldwin Hills . . . like the **wonderful steak fries** and **barbecues** we have enjoyed there prepared by **friendly** Standard Oilers . . . here the **first** Lufkin pumping unit was installed **in California** in the **year 1924** and still going strong at Ruble No. 12, after nearly **thirty years continuous service** . . . and the many, many successive herringbone gear installations.

At the refinery, our party, **outfitted with shiny new safety helmets,** was greeted by a host of **technical** and **management personnel.** With well organized efficiency, we broke up into smaller parties and were soon off on a **Cook's tour** of this newly completed project, including a **40,000 barrel catalytic cracker,** a 52,000 barrel residuum stripper and **(smog authorities please note)** an H_2S plant which converts trapped fumes into sulphuric acid. **Company President T. S. Petersen** said these installations met the Smog Control's regulations 100 per cent.

Builders of this fine addition were identified by a well placed plaque which read: **"This Plant Designed and Constructed by The Fluor Corporation, Ltd., Los Angeles."**

Topped by a **fine luncheon** and a factual resume by **Refinery Manager D. K. Harger,** we cranked up the bus, piled in, **adjusted our safety belts,** turned in our safety helmets and, without a hitch, made a four-point landing right in front of the Petroleum Club.

(Lufkin produces the finest . . . pumping units . . . cooling tower gears.)

The Festivities Begin

The decorations which were novel, beautiful, and most effective, were the work of John Beistal, and the catering, about as tempting and appetizing as you're ever likely to find was by Mary Luster. That Petroleum Club favorite, Barney Sorkin, and his boys, provided the rhythm for some really enjoyable dancing and for a series of fine vocal numbers by Vivian Lloyd, the lovely and talented daughter of the Examiner Ed Lloyds who, by the way were also present. We noted among those tripping the light fantastic, and there certainly was some fantastic tripping all right, the Fay Wrights, who we are told are still living on their Petroleum Club Del Mar Day winnings; the Pete "Brush-top" Gardetts, former flying horse people turned consultants; the Paul Terrys, Capital Company higher-ups, whose stepping has the Gowers pretty badly worried; the W. S. "Windy" Paynes, Richfield engineers and former Cuyamans; and the R. J. "Bob" Sullivans, he—Times oil editor, she—the ideal complement of a neat little couple.

More Word Derivations

Also much in evidence were the E. K. "Ernie" Parks, consulting biggies and philosophers extraordinary; the Ed "It's a fine type of play" Bartoshes, Bankline geological people, doing the Lambeth Walk; the Ted Bears, already introduced; the Ed Bedfords of Western Gulf land department, just back from an European trip; the Paul Broxons, Western Gulf expert in legalistic complications and gin rummy; the Frank Carters, the geological flying horse-

HANCOCK
OIL COMPANY
PRODUCERS • REFINERS • MARKETERS
SINCE 1922

man and noted narrator of Nisei folklore; the Frank Fuellers, Sunray land biggies and highly regarded dominoists; the Don Fords, holding a high place among the better oil attorneys; the Everett Millers, former Texaco landman, later Cuyama authority, and always a sharpie on the tennis courts; the Ace Riedels, Standard of Cal contract manager—and noted duck hunter; the Moriqui Exploration people, to wit, Bill Moran, one of the west's most eligible bachelors; the J. P. "Berna" Rindes, his dad owns a flock of pulp and paper mills over in Norway; and the Akley Quirks, former Standard of Cal land people, just back from some pleasant jaunting in Europe. Put together Moran, Rinde, and Quirk and the derivation of Moriqui becomes immediately obvious.

Among the Dancers

Also spotted whirling about the dance floor were the Harry Goddes, Signal Oil & Gas Company executives, with whom we shared dinner and some most enjoyable small talk; the Bart Hutchinses, right arm to Ed Pauley and one of the industry's most feared poker players; the R. G. "Scotty" Greens, Union's land department manager and divot lofting whiz; the Harold Hootses, consulting geologists, independent producers, and swifties on the dance floor; the Vic Kings, GP's exploration advisers, and another pair of right neat two-steppers; the Bill Kleinpells, noted Bakersfield paleontologists and dove hunters; the Glen Ledinghams, Western Gulf exploration chief, and an expert tosser of the speckled tiles; the Francis Minshalls, two of the best, already mentioned; the Leo Newfarmers, Shell's top explorationist and one of our more proficient TV expounders; the Earl Nobles, geological consultants and dabblers in black magic; and the Bill Porters, well known consultants, producers of light and heavy crude, and banjoists extraordinary.

Even from Bismarck They Came

Also swinging a snappy samba were the Wilbur Rankins, noted micropaleontologists, and more dan-

Frank J. Leonis, western regional sales manager for Security Engineering Corporation of Whittier and other world centers, is a quiet, undemonstrative short of chap but very capable nonetheless. He is a native Angeleno and, consequently, thinks there is no finer place extant than the western metropolis. He was educated in the local schools and started his oil career up Bakersfield way as a roustabout for Ohio Oil Company in 1933 and for the next several years foraged about the San Joaquin Valley doing everything and anything he could get to do around an oil rig. For four years he worked with Lane-Wells Company as a field service man and was tucking some very useful experience under his belt when the war came along and stopped all that. He did a hitch for the U. S. Navy and then returned and accepted a spot with Baker Oil Tools for about a year after which he tied in with Security Engineering Corporation and has since had some mighty interesting experiences. He spent his first Security year in California, his second in the Rocky Mountain area—operating out of Casper, Wyoming, and then had extended stays in Edmonton, Alberta, and Mexico City. Throughout all these peregrinations he maintained a home in Downey where he is now regarded as one of the more substantial citizens. He is the papa of a lovely daughter, Michele, who is now eight years old and can take an active part in directing the affairs of the household. In his spare moments Frank is an inveterate hunter, mostly stalking elk, deer, antelope, and moose out of the Pinedale country in Wyoming. He hasn't shot a moose yet, but still has high hopes. He has recently taken to skin diving and is getting quite a kick out of foraging about the ocean bed in search of marine oddities. Altogether Frank lives a full life, and he is, in consequence, a good conversationalist and a good companion on any occasion.

gerous than potassium cyanide in any kind of speculative enterprise; the Elmer Rogers, Union Oil Company controlling higher-ups—he a swimmer as already noted, she—one of the oil industry's loveliest ladies; the Tom Wallaces, the vice presidential Western Gulfers, and two of the finest—Tom, however, has an uncomfortable familiarity with the law of probabilities that makes him a dangerous opponent in any game of chance; the Louis Waterfalls, consulting geologists and, excepting in a domino game, as nice a couple as you will find anywhere on the petrolic circuit; the C. G. "Tom" Williamses, Universal Consolidated vice presidents, and rare performers in the square types of terpsichorean exercise; the Union Oil Company Fred Bushes, young, good looking land people just back from a prolonged stay in Bismarck, North Dakota, and glad to be home; and that outstanding drawer and pegger, Dee Taylor, the Shell geological sharpie, accompanied by Mrs. Margarette Dunn.

The Pied Pipers Lead Us On

Cutting a mighty fast rug, too, was Jim Dorrance, the Texaco production executive, better known as the petrolic Fred Astaire; and then there were Bob Stein, erstwhile associate of Loren Hillman, just back from a reconnaissance trip into the Wyoming area of the Williston Basin. Bob escorted another pretty, Miss Wolfe. Actually there were about 110 guests at this delightsome soiree and it was by all means a gorgamous affair. We personally were so hypnotized by the musical offerings of Barney Sorkin and his pied pipers that we did altogether too much Charleston again and had to have an osteopath twist the old sacroiliac back into its groove. But even so it was a thoroughly enjoyable evening and we for one are mighty glad that Ted Sterling discovered the Castaic field—anyway, what is a sacroiliac more or less at a time like this.

Bits of This and That

By way of last minute roundup we are glad to see Ham Bell back in his old haunts and we hope his

Two Great Names
and American Republic

Combined to give

Immediate Service to California Customers

The Republic Supply Company of California has been appointed exclusive distributor of American Pumping Units for California.

This great supply company, with its many outlets strategically located throughout the oil fields of the state will provide prompt service to producers on long-lasting, trouble-free American Pumping Units.

Republic will maintain a complete stock of replacement parts for American units and will handle other American products.

For Fast Service on American—call Republic

AMERICAN MANUFACTURING COMPANY OF TEXAS

AMCOT

P. O. Box 7037, Fort Worth 11, Texas

THE REPUBLIC SUPPLY COMPANY OF CALIFORNIA

republic supply

Executive Offices: 2600 South Eastland Avenue, Los Angeles 54; California

troubles are over for a long time. Before this appears in print, the Petroleum Club Football Rally will be a thing of the past. This high class whingding is being arranged by Mrs. A. C. Rubel and a committee of assisting ladies and should be very much worthwhile—details later. The PPP will have its fall roundup at Camp Comfort, Ventura, on October 2 and fevered preparations are now under way for that affair. Dave Staples, president of Tide Water Associated, was guest of the Petroleum Press Club recently and did an excellent job of expositing on the past, present, and future of his company, which was no surprise to us. Dave, besides having plenty of petroleum experience, has the industrial savvy and administrative capacity that identify the successful executive. Too bad Meitzie Palmer didn't get the top D & D job. She is a very capable gal and would have done herself and the organization proud. This, of course, is no reflection on the qualifications of the lady who was chosen. She is no doubt also a high class performer or she wouldn't be in there. But out here on the coast we think a lot of Meitzie and we are naturally just a wee bit biased in her favor.

A father took his son to the golf links with him.

After his dad took about five swings and missed every time, little Bob piped up: "It looks like great exercise, Pop. But what's the use of having a ball?"

The mother couldn't convince her six year old son of the necessity of washing behind his ears.

"That's as useless," he squawked, "as combing your hair before you go into a dark movie."

Timmy was being sent to a summer camp much against his will, and was making no bones about it.

"Why, you'll love camp," his aunt enthused. "You'll have a wonderful vacation."

"I won't," he wailed, "but my mother will."

THE GREATEST IMPROVEMENT ...FOR CENTERING CASING WHILE CEMENTING SINCE 1925

B and W
LATCH-ON CENTRALIZERS
with the NEW
KON-KAVE BOW

B and W KON-KAVE BOW combines a curved cross-section, highest quality spring steel, drop forging, and the proper heat treatment to relieve all stresses created in forming and welding B and W KON-KAVE BOWS.

FIRST IN THE FIELD!

- Strongest—greatest resistance to side thrust.
- Most resistance to deformation . . .
- Easiest to install and run.

B and W Inc.
Well Completion Specialists

GULF COAST
Box 5266
Houston 12, Texas
Phone WE-6603

WEST COAST
Box 3751
Los Angeles 54, Calif.
Phone ME-4-1106

Some Economics of Oil Storage

(Continued from Page 5)

struct. They do raise serious problems of cracking, deterioration repair, etc., and it is not believed likely that they are practical for common use in petroleum storage at the present state of the art.

Large-size underground steel storage tanks have been constructed. The New York, N. Y., and Washington, D. C., city codes require underground construction. Such tanks cost two to three times conventional aboveground tankage. This is prohibitive for normal use.

Survey Indicates No Cause for Undue Alarm

In summary, the industry survey has provided valuable information about the problems of brittle failure of oil storage tanks. It has now become possible to assess its magnitude in comparison with other hazards of life. Like all other engineering phenomena, both good and bad, brittle failure occurs in varying degrees. A few spectacular failures have occurred. Nevertheless, the hazard is small in comparison with well-known hazards like fire and auto accidents. There is no cause for extreme concern.

Presented to a session on oil storage-tank failures during the 19th Mid-Year Meeting of the American Petroleum Institute's Division of Refining, in the Rice Hotel, Houston, Texas, May 11, 1954.

[1a]Figures refer to REFERENCES.

REFERENCES

[1]Carl H. Samans, "Results of the Survey of Study Group on Oil Storage-Tank Failures," API Division of Refining 19th Mid-Year Meeting, Houston, Texas (1954).

[2]Frederick G. Coqueron, Financial Analysis of Thirty Oil Companies for 1952, Petroleum Department, The Chase National Bank, New York (1953).

Judy returned from a birthday party and complained to her mother that the boys had kept together and ignored the girls.

"But," she continued, "I got one of them to pay attention to me, all right."

"How?" her mother asked.

"I just knocked him down," Judy replied.

WHEN YOU NEED THEM MOST

THEY'RE READY!

There are now 58 Bethlehem Supply stores in the active oil fields of 12 different states. Traveling east to west, you'll find these modern, well-equipped stores from Illinois to California. Or, if you start from the Gulf Coast and travel north, you won't see the last one till you're almost in Canada.

During the winter some of the northern stores are pretty well snowed in. They have their problems. And the weather can be mischievous, too, in other parts of the country. But weather never closed a Bethlehem door, and when you need supplies, our men will get them to you. If you're stuck for a piece of equipment, phone or pass the word along and we'll do the rest.

Bethlehem Supply stores are fully stocked with the items needed day by day . . . like valves and fittings, Beth-Co-Weld line pipe, hose, packing, gaskets, paints and hardware, belting, drilling equipment, pumping units, wire rope, sucker rods, etc. Each of these stores is a regular field warehouse, one you can rely on, always.

Come and see us, won't you? We like to make new friends, and our stores are the kind that make 'em and keep 'em.

BETHLEHEM SUPPLY COMPANY

General Offices: 21 E. Second St., Tulsa, Okla.
West Coast Headquarters: Los Angeles, Calif.
Export Distributor: Bethlehem Steel Export Corporation
25 Broadway, New York, N. Y.

BETHLEHEM STEEL

Personalities IN THE NEWS

Promotion for Thomas at G. P.

Calvin T. Thomas has been named Manager of the Transportation Department of the General Petroleum Corporation. In his new position Thomas will continue to supervise the company's Marketing Department's transportation facilities and personnel which have been merged and consolidated with the Transportation Department.

Calvin T. Thomas

Thomas has been Manager of Automotive Equipment for the Marketing Department since 1948.

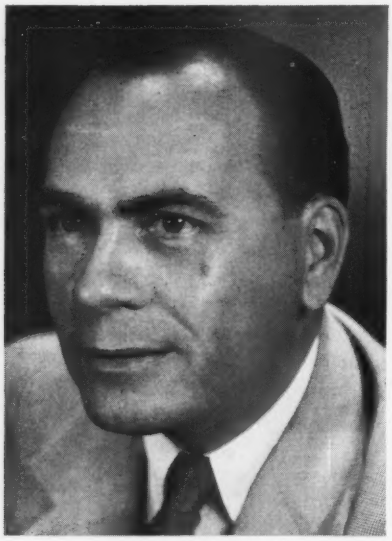
Among his industry activities are the Society of Automotive Engineers, the California Highway Users Conference, the American Petroleum Institute, and the California Private Truck Owners Conference.

California agent of Bayou Interests, Inc., New York, is CT Corporation System, Mills Building in San Francisco. The company is interested in various production aspects of the oil business.

Pedersen Advances at G. P.

R. S. Pedersen has been advanced to the post of Buyer for General Petroleum Corporation's Purchasing department, P. J. Whiteley, manager, announced recently.

Pedersen, who has been with General Petroleum for nearly twenty years, will be located at the company's East 37th Street offices in the Vernon area of Los Angeles.



R. S. Pedersen

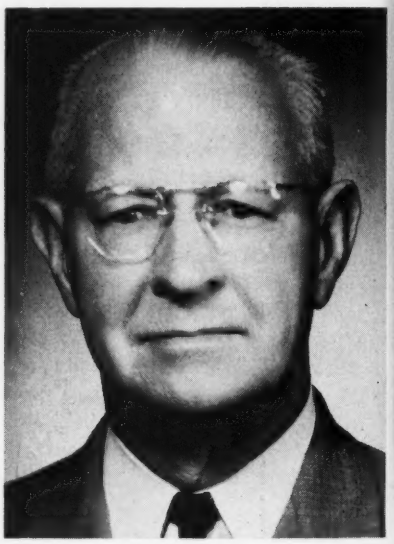
He had been Office Supervisor for the Purchasing department's Los Angeles offices since 1948.

A native of Seattle, Washington, Pedersen has been active in church activities and is currently representing the Lutheran Church on the Business Men's Committee of the University Religious Conference. He is a junior member of the Petroleum Production Pioneers.

Officers of the new Walker Oil Salvage & Trucking Company of Bakersfield include J. Allen Walker, Jean Walker and Frank McKay.

Grace Now With Le Roi

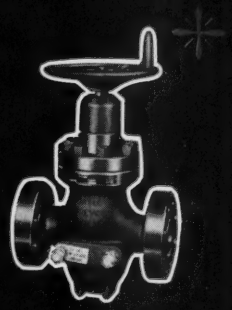
Le Roi Engine Sales of Long Beach, Calif., announces the appointment of W. W. (Wally) Grace as sales engineer to represent the Le Roi line of Oil Field engines in the Southern California area. Mr. Grace is an old timer in the oil field supply business having spent many years with Wilson Oil Tool Corporation, National Supply Company



W. W. Grace

and for the past ten years he has been selling pumping engines to California operators.

Alma Benjamin, for more than 20 years secretary of the Severns Drilling Company at Los Angeles, is on the way to recovery in St. Vincent's Hospital in Los Angeles from injuries suffered in an auto accident in Northern California. The accident occurred near Ukiah and after treatment for some days in the Ukiah Hospital, Miss Benjamin was flown by air ambulance to the Los Angeles hospital. Her companion on the northern trip, Margaret Dolan, was not hurt critically.



McEvoy Valves don't need words to describe their Tightness, Safety, and Dependability.

Let McEvoy Valves prove it for you.

Sargent Announces Production Equipment Line

Sargent Engineering Corporation, for more than thirty years builders of deep well pumps, announces the addition of a line of production equipment supplies to be sold through its twenty-two field stores.

V. A. Kelley

Heading this addition is V. A. Kelley, formerly Mid-Continent sales representative and more recently representing Bethlehem Steel Company and Johnson-Fagg Engineering Co., has been appointed Manager of Production Equipment Supplies for Sargent Engineering Corporation, according to the announcement of H. L. Sargent, Vice-President, Oil Tool Sales.

Kelley attended University of Oklahoma until 1932 and worked as roustabout and roughneck for Hunt Tool Co. and Sun Oil Co. at Kilgore, Texas. He first joined Sargent in 1936 at Shawnee, Oklahoma. He has been stationed at Tulsa, Dallas, Houston and also covered the West Texas, New Mexico territories where he is well known to many operators.

Lowry Lytle, widely known oil man, has returned from a long vacation which took him all over Europe. He returned to the United States on the SS Nieuw Amsterdam, docking at New York.

Important Promotions Made at Standard Oil

Appointment of two new departmental general managers in the western operations of Standard Oil Company of California has been announced by E. J. McClanahan, vice-president of the company.

Fred Powell has been named to head the Manufacturing Department, succeeding O. N. Miller, now a vice-president of the company. J. E. Gosline takes over the Producing Department, which previously operated directly under vice-president J. E. Toussaint.

Powell was formerly president of California Research & Development Corporation, a Standard subsidiary which was dissolved earlier this year upon completion of its contracts with the Atomic Energy Commission. In the interim, he has been serving as assistant manager of Manufacturing with supervision over chemical production.

A native of Portland, Powell is a graduate of the University of Washington and joined Standard in 1925. He is a former manager of the company's El Segundo Refinery.

Gosline, who previously served as assistant general manager of Producing, has been with Standard since 1933. A native of Carnegie, Pa., he is an alumnus of the University of California.

Prior to joining the headquarters management of the Producing Department, Gosline headed up the Southern District of this organization in Los Angeles. He is a past president and one of the founders of the Petroleum Production Pioneers.

Brown Mud Company Expands

Brown Mud Company has just completed warehousing arrangements at the Tremont warehouse, Dixon, California, telephone Rio Vista 4-0813, in order to give even better service to its clients in that area. Irving (Irv) Leutholtz is in charge.

Brown Mud Company, in addition to the new warehousing arrangements, has warehouse stocks at Torrance, Bakersfield, Ventura and Piru.

Continental Merges Division Headquarters

Continental Oil Company has reported unification of its Bakersfield and Ventura divisions with geological and land offices in the Crites Building in the Kern County oil city. A number of other operating organizations in recent months have consolidated branches by centralizing offices in Bakersfield.

P. M. (Shorty) Bowen of Martin-Decker Corporation (center) was inducted as an Associate Member of the Los Angeles Chapter of Nomads at its regular monthly dinner meeting, September 8, 1954. To the left is Harry Hester of McCullough Tool Company, Ritual Master; to the right John Flanagan of Johnston Testers, Inc., President of the Chapter.

Executives and sales engineers of the H. C. Smith Oil Tool Co. at the opening of the company's new office and warehouse in Ventura, California. Standing left to right: Ray Faulk, Fillmore Branch Manager; Herschel C. Smith, Vice President and General Manager; Virgil Fowler, San Joaquin Division Manager; Gene Madsen, Southern Division Manager; Frank Zuech, Cuyama Branch Manager; Ralph Dunn, Service Department Manager; Kneeling, left to right: Frank Bush, Office; Art Hawkins, Ventura Branch Manager; Charles Petrie, Ventura Sales; Jack Lander, Fillmore Sales; Seated, left to right: Tom Eakin, Ventura Sales; A. B. Williams, Coast Division Manager; Art Marshall, General Sales Manager; H. C. Smith, President; O. C. Schmidt, Chief Design Engineer.

Promotions at Kobe

W. F. "Pete" Slater has been named General Sales Manager of Kobe, Inc. according to a recent announcement by C. J. Coberly, President of the company. Other promotions announced were R. G. Ralph, named Hydraulic Service Manager; Ray Elner, Hydraulic Sales Manager; and J. T. Lewis, Southern Division Sales Manager.

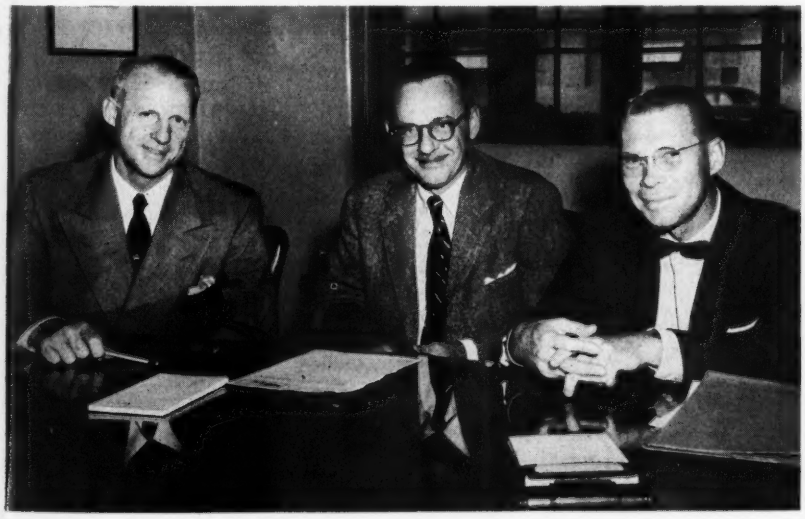
In his new post W. F. "Pete" Slater will be responsible for Hydraulic Sales, Hydraulic Service, Pipe Processing Sales, Industrial and Export Sales, and the Oklahoma City Plant.

Russell Ralph will head up service and field shop operations, as well as the field testing phase of the company's extensive product research and development program.

Ray Elner has been transferred from Fort Worth, where he was Southern Division Sales Manager, to Huntington Park and will have overall charge of the sales of Kobe hydraulic pumping equipment.

J. T. Lewis, formerly West Texas District Sales Manager, at Midland, has been moved to Fort Worth where he will be Southern Division Sales Manager. S. S. McDonnold will take over the post in Midland vacated by Lewis.

In making the announcement, C. J. Coberly stated that these moves were a result of shifts in the organization structure designed to accommodate the company's rapidly expanding participation in the oil well pumping equipment.



Principals involved in the recent series of promotions at Kobe are, from left to right: R. G. Ralph, named Hydraulic Service Manager; W. F. "Pete" Slater, General Sales Manager; and Ray Elner, recently transferred from Fort Worth, Hydaulic Sales Manager.

Oil men better keep busy if they are going to continue to supply the consumptive demand of California's growing population. Carle F. Wente of San Francisco, California State Chamber of Commerce president, predicted the other week that by 1975 the state will enjoy a population of 21,000,000 and making it tops among all states.

Herbert Hoover, Jr. will assume his duties as the new Undersecretary of State on October 1. As Undersecretary, he succeeds Walter Bedell Smith, who is retiring after 43 years of Government service. Hoover for the past year has been working closely with Secretary of State Dulles as an adviser on international petroleum matters. The 51-year-old son of the former president, recently resigned from the board of directors of Union Oil Company of California, as board chairman of the United Geophysical Company of Pasadena, a subsidiary of Union Oil.

J. H. (Jack) Sembower, Shell Oil Company in San Francisco, has been elected a vice chairman of the National Oil Industry Information Committee. He was named at the regular meeting of the OIIC held recently in Chicago. At the same time, W. R. Huber of Pittsburgh, Pa., Gulf Oil Corporation general manager of public relations, was elected chairman of the committee. He will take office in December, succeeding G. Stewart Brown, manager of public relations for Standard Oil Company of California. John S. Cooke of the American Petroleum Institute, New York, was reelected secretary.

Rocky Mountain NEWS

Colorado—Idaho—Montana—New Mexico—Utah—Wyoming—Western Canada

The conservation situation, particularly market demand pro-ration, in the Rocky Mountains was a big item on the agenda of the recent meeting of the Interstate Oil Compact Commission in Omaha. With numerous Rocky Mountain oil men in attendance, J. C. Donnell, II, president of the Ohio Oil Co. urged passage of adequate oil and gas conservation laws. Rocky Mountain oilmen attending reported an increasing favorable reaction to the desirability of market demand proration in the Rocky Mountain states.

Donnell stressed the fact that for the first time in history the pipeline outlet capacity, now in operation or projected, will exceed oil availability. The prospects for new reserves are good, Donnell stated. Lack of modern conservation laws to support practical conservation was listed by the oil executive as the missing factor in some states.

The Rocky Mountain Oil and Gas Association will very probably sponsor market demand pro-ration laws in Nebraska, Colorado and Wyoming when the legislative sessions convene this coming winter. Nebraska and Colorado are members of the Interstate Oil Compact Commission. Wyoming, largest and oldest producer in the Rockies, is not.

Montana

A wildcat success and two apparent discoveries have sharpened the exploration news from Montana. Midway between Cut Bank and Darling, Superior Oil Co. has completed No. 1 Berkram, North Cut Bank, Glacier County, as a Madison limestone discovery flowing 12½ barrels oil per hour. Production followed a 2000 gallon acid treatment of the zone 2733 to 2743 feet. The Madison top was checked down as 2729 feet. The Moulton, topped at 2473 feet, yielded a gas flow of 3,540,000 cubic feet per day in the interval 2466 to 2500 feet. Total depth was 2894 feet.

In Carbon County, near the Wyoming line, J. Ray McDermott has recovered 1650 feet of 45 gravity oil from the basal Frontier at No. 1 Clark's Fork Unit. The zone 6715 to 6757 feet was the tested interval which also produced 30 feet of oil and gas cut mud. The unit was farmed out from British-American Oil Producing Co. which completed a gas-distillate Dakota discovery in the unit in 1949. In 1945 General Petroleum Corp. completed a second Frontier discovery which flowed 200 barrels oil per day from the second Frontier; but the discovery has since been abandoned. McDermott will drill ahead to test the Morrison before completion.

Two and one half miles northwest of Ordovician production in the Little Beaver field of the Cedar Creek Anticline, Shell Oil Co. has recorded a flow of 264 barrels oil per day from the Ordovician age Red River formation. The tested zone was at No. 14-34 Unit, Montana Dakota Unit Area, Fallon County. The apparent discovery is within a gas producing unit of the Montana-Dakota Utilities Co. but there has been no previous test to such depths. This well also recovered oil from the Madison limestone interval 6828 to 6258 where 1720 feet of oil was recovered in two and one-half hours.

Continental Oil Co. was principal and highest bidder for Blackfoot Indian acreage at a recent Montana sale of acreage in an area west of two Glacier County apparent discoveries. Continental bid a bonus of $179.77 per acre for several tracts. Bids ranged down to $3.00 per acre. The acreage is generally west of the Landslide Butte and Cadmus areas where Carter and Union Oil companies, in combination, have drilled three apparent discoveries. Other successful bidders at the sale were: Patrick J. O'Horneet, Tide Water Oil, The California Co., Gulf Oil Corp., Heep Oil Co., Brown and Brown, Phillips Petroleum Co., Lion Oil Co., Bar Mac Production Co., Skelly Oil Co. and Sunray Oil Co.

McAlester Fuel and Goldston Oil are preparing to perforate No. 1-A Grebe, Northwest Sumatra, Rosebud County, an off-set to a Texas Co., Amsden dry hole. A test of the interval 4685 to 4704 feet recovered 75 feet of oil, 30 feet oil and gas cut mud and 90 feet of water. The Amsden was topped at 4208 feet and the Sumatra at 4518 feet. Total depth is 4862 feet. The No. 1 B Grebe drilled in 1953 by The Texas Co. was dry with the top of the Amsden at 4225 feet. A drill stem test recovered only mud from the zone 4651 to 4815 feet.

Brinkerhoff Drilling Co. was top bidder at a recent sale of Crow Indian reservation acreage. Brinkerhoff paid a bonus of $26.75 per acre for an 80-acre tract south of the Soap Creek area of Big Horn County. Forest Oil Corp. was second bidder paying $25.02 for Big Horn County acreage. With 62 tracts offered, bids were forthcoming on 35 tracts totaling 8486 acres. Average bid was $3.25 per acre.

In other land action, 50,000 acres of Indian lands will be placed on the bonus block at a sealed bid sale which will be conducted at the Fort Peck Agency, Popular on October 5. Usual terms for Indian sales will apply.

A 5600 foot Red River test has been projected by British-American Oil Producing Co. for the South Porcupine Area of Rosebud County. The test will be No. 1NP-Fuller

Since the discovery of oil, the petroleum refining industry has been constantly squeezing more and more useful products from every barrel of crude. The success of its work is best evidenced by the comparison of product recovery during the early days of refining with the volume of products now being obtained from today's barrel of petroleum.

Working cooperatively with the petroleum refining industry, Universal proudly points to its contributions that have helped provide better processing methods and more efficient refining techniques. All of these have been successfully applied to help the petroleum refiner realize a more profitable return on each dollar invested in processing equipment.

The research and development work conducted in Universal laboratories over a period of more than thirty-five years has been done for the benefit of the entire petroleum refining industry. The processes and products resulting from this work have been made available to every petroleum refiner. And they have been widely applied by refiners the world over.

To obtain better products, and to conserve one of our most vital natural resources, Universal will continue to develop improved methods for refining crude oil. More and more product must be obtained from each barrel of petroleum, yet volume alone isn't sufficient. Product quality must be constantly improved to provide every ounce of energy which every drop of oil is capable of producing. With this goal in mind, Universal will always continue to nourish The Barrel That Never Stops Growing.

UNIVERSAL OIL PRODUCTS COMPANY

UOP

30 ALGONQUIN ROAD, DES PLAINES, ILL., U. S. A.

Laboratories: RIVERSIDE, ILLINOIS

Universal Service Protects Your Investment

on acreage farmed out from the Cyprus Mines Co. It is seven miles north of a Heath failure drilled by Cyprus Mines earlier this year.

In the South Chester Area, Liberty County, Amerada Petroleum Corp. has abandoned its fourth failure in that area. No. 2 Kolstad recovered water in the Madison and the Sawtooth. Total depth was 2345 feet. At two other active holes Amerada is drilling ahead below 3762 feet in the Devonian while No. 1 Kinread is rigging up.

Mobil Producing, wholly owned subsidiary of the Socony Vacuum Oil Co. is rigging up rotary for an 8300 foot Winnipeg test at No. T-44-10-1, East Tullock area, Big Horn County. The wildcat is nine miles east of Tensleep production at Snyder field and six miles south of a recent 8770 foot Cambrian failure drilled by J. Gree, Trustee and Delhi Oil Co.

North Dakota

Cardinal Drilling Co. is running casing at No. 1 Steen, northeast extension of the Northeast Landa field, Bottineau County, after recovery of 466 feet of free oil from the interval 3051 to 3061 feet. The test is three quarters of a mile northeast of the field. Excellent porosity was reported for cores cut from 3029 to 3050 and 3050-3060 feet. Previous wells in this area have had water in the recoveries. Pressures are also reported higher than for other wells of the area.

The Caroline Hunt Estate has announced four more wildcats in Kidder and Burleigh Counties, north central North Dakota. When one more test is announced, it will complete the roster of a 15 wildcat drilling program undertaking on a farmout deal from the Continental Oil Co. and the Pure Oil Co. The four new tests are: No. 1 Soder Investment, No. 1 Schlaback-State, No. 1 Ryberg in Burleigh County and No. 1 Sauter Estate, Kidder County. The No. 1 Waltz, Jr. Sheridan County, has been abandoned without shows at total depth 6782 feet.

Nebraska

Two relatively rank Kimball County wildcats have made oil recoveries on recent drill stem tests. Don Round et al have recovered 970 feet of free oil and 180 feet of oil and water cut mud at No. 1 Leonard. Test zone was 6451 to 6491 feet. The test is three miles west of the Long field and south of production in the Enders field.

Gem Oil Co. has recovered oil from the J sand interval 5453 to 5470 feet at No. 1 Woten. In addition 300 feet of oil cut mud was recovered in the wildcat seven miles north of the town of Potter.

In other Kimball County activity, two discoveries have been completed. Sam Joseph, California independent, has reported a pump gauge of 20 barrels per hour for a J sand discovery at No. 1 Houtby. Production is from perforations 6002 to 6010 feet.

To the southwest, Williamson, Nixon and United Drilling have completed No. 1 Sweringen, also in the J sand, pumping 450 barrels oil per day. It is two miles northwest of the Dietz pool while the Joseph discovery is north of production at Kenton field.

Wyoming

Forest Oil Corp. has completed its Grieve Unit discovery, Natrona County, with a flow gauge in excess of 1000 barrels oil per day. The 22-1 Unit, was drilled as a rank wildcat in a heavily faulted area 35 miles southwest of Casper. The flow is coming from a producing interval 6723 to 6780 feet from a zone which has not been identified by the operator further than a Cretaceous sand topped at 6722 feet. The discovery is generally considered the pre-eminent Wyoming discovery of the 1954 summer season.

Forest has announced two more tests for the 25,000-acre unit. No. 22-2 will be drilled as a northwest off-set to the discovery. No. 3 Unit, one and one-half miles southwest, will be a wildcat to test deeper horizons than those encountered in the discovery.

The discovery was drilled to a total depth 7288 feet plugged back to 7230 feet. It was originally scheduled to test the Tensleep anticipated at 9200 feet. The discovery oil is greenish-brown 36.4 gravity with a paraffin base.

Testing and drilling continues at other Wyoming apparent discoveries. In the South Ash Creek area of Sheridan County Shell Oil Co. has recovered 3760 feet of clean gassy oil at No. 1 Hullworth. The Ash Creek sand interval 4885 to 4905 feet yielded the 35 gravity oil. Shell is continuing to swab. The discovery is two and one-half miles south and east of the Ash Creek field where J. Ray McDermott established production in 1952 on acreage farmed out from Shell. The general area has been rather heavily drilled this summer. C. M. and W. Drilling Co. and Phillips Petroleum had drilled dry holes in the vicinity this summer. The Ash Creek field is in the northwest corner of the Powder River Basin.

Across the mountains in the Big Horn Basin, California Co. has recovered oil from both the Phosphoria and the Tensleep at No. 8 Nieber Unit. It has swabbed ten and eleven barrels per hour from both zones. Total depth is 10,546 feet. The rank wildcat is five miles southeast of Phosphoria production on the Nieber Unit.

Five miles southwest of the Baggs field, Carbon County, J. Ray McDermott has tested commercial shows of gas at No. 1 Govt. In the first test of the interval 4686 to 4696 feet gas was at the surface in less than one minute at a rate estimated at 2,000,000 to 3,000,000 cubic feet per day. In a second test in the interval 4697 to 4762 feet gas flowed 2,800,000 to 3,140,000 cubic feet per minute. The gas burned a blue flame. The operator has not identified the formation although it may be the Mesaverde. Last reported top was for the Lewis tentatively set at 3950 feet.

Stanolind Oil and Gas Co. have obtained a recovery from the Frontier at No. 1 Sherwood Unit, Natrona County. A test of the zone 9633 to 62 had gas to the surface in 22 minutes but no measurement was made. Oil and gas cut mud were recovered in the amount of 180 feet. The unit is in northeastern Natrona County east of the Salt Creek field. This is the first test of the unit.

The Phosphoria has yielded 180 feet of oil cut mud at No. 1 Govt. Rushmore, Buffalo Springs Area, Hot Springs County. Casing has been set to 4108 feet and completion will be in an open hole. The rig for this test was moved over from No. 1 Orchard, three-quarters of a mile

THERE'S NO MAGIC ABOUT IT

. . . NOR IS THERE ANY MAGIC in saving time on even the most complicated process construction job when it's in the hands of qualified men . . . Procon men.

Saving time is the logical result of a combination of factors . . . careful planning at the outset . . . engineering competence . . . broad experience that insures quick decisions, and right ones . . . proper coordination of all duties . . . a thorough knowledge and understanding of every operation involved . . . a willing acceptance of responsibilities . . . plus a sincere desire to make every hour productive to the fullest extent.

These are Procon's standards, and while the time saved will be of great value to you, it will cost you nothing extra . . . another important reason for entrusting your next process construction job to Procon.

PROCON *Incorporated*

PROCESS CONSTRUCTION

1111 MT. PROSPECT ROAD, DES PLAINES, ILLINOIS, U. S. A.

IN CANADA — PROCON (CANADA) LIMITED
40 ADVANCE ROAD
TORONTO 18, ONTARIO

IN ENGLAND — PROCON (GREAT BRITAIN) LIMITED
112 STRAND, LONDON, W. C. 2

PROCON

northeast, which was abandoned without shows at total depth 4237 feet.

A saturated core of the fourth Frontier interval 3939 to 3981 feet has been reported by Natural Gas and Oil Co. for the No. 1 Govt. Anderson, Hat Six Area, Converse County. A drill stem test 3641 to 3652 feet recovered 1382 feet thin mud.

In northeastern Natrona County, Natural Gas and Oil and McElroy Ranch Co. have abandoned No. 1 Shannon after non-commercial cores and drill stem tests. Total depth was 3950 feet.

The third attempt to establish production on the Green Mountain Unit of Fremont County will be undertaken by the California Co. on a farmout from British-American Oil Producing Co. and the Natural Gas and Oil Co. The Green Mountain Unit adjoins Sinclair Oil and Gas Co.'s Happy Springs Unit which produces from the Frontier, the Dakota, the Lakota and the Phosphoria. No shows were reported for either of the other two tests drilled so far on the Unit.

In the Wyoming portion of the Denver Julesburg Basin, Pure Oil Co. has abandoned No. 1 Rinehart, Lindberg area, Laramie County. The wildcat was a Lyons sand test. The objective was topped at 8750 feet. Pure took the test over from Earl F. Siler.

Sweetwater County has led recent Wyoming wildcat locations with Gulf Oil Corp. and Chicago Corp. both announcing wildcats. At Southwest Table Rock Unit, Gulf will drill No. 1 Unit to test through the Mesaverde formation to the Baxter shale anticipated at 9000 feet. At Table Rock Unit in this same township Texas Co. established gas production in the Mesaverde early this year. Older wells in the Table Rock field had produced gas from the shallower Tertiary sands. West of the Gulf test, Chicago Corp. will have the Jurassic age Nuggett as the objective for No. 1 Govt. The test is northwest of production in Mountain Fuel Supply Co.'s Middle Baxter Basin field. This field produces gas from the Frontier, Dakota and Lakota. North Baxter Basin produces from the Nuggett.

Colorado

Five miles west of the south end of the active Adena field, Morgan County, British-American Oil Producing Co. has reported a flow of oil, not estimated, at No. 1 Hegarty. Operator cored 15 feet of J sand with oil shows. The tested zone was 6198 to 6115 feet.

Following sandfrac at No. 1 Virbeth Land, Southern Union Gas Co. has recovered gas at the rate of 3,000,000 cubic feet per day. The LaPlata County wildcat has been shut in for gauge. The productive zone was 5296 to 5650 feet. The Cliffhouse top was 4895 feet and top of the Pictured Cliffs was 5320 feet. The wildcat is a mile and one-half south of previous production in the Red Mesa Area.

The new pool southeast of the Badger Creek field, Washington County, opened by the New Drilling Co.'s No. 1 Blomenkamp has been designated the Big Beaver Field. The J sand discovery is still testing.

Twelve miles west of the Little Beaver and Badger Creek fields the Adams County discovery of Ryan Oil-Davis Oil and Potter Drilling Co. has been completed with a pump gauge of 130 barrels oil in ten hours.

New Mexico

First encouragement in a current Continental Oil Co. exploratory program in the non-productive Raton basin has been registered at No. 4 St. Louis—Rocky Mountain and Pacific. The Dakota yielded 195 feet of slightly oil cut mud from test interval 2793 to 2843 feet. The wildcat is currently drilling ahead.

Canada

Deepest test ever drilled in Manitoba has been abandoned at total depth 7000 feet by Souris Oil Co. The wildcat was located near Coulter in southwestern Manitoba.

Wet weather and consequent poor road conditions have cut the allowable for the famous Pembina field of Alberta to 500 barrels daily for September, the provincial petroleum and natural gas conservation has reported. In assessing the September allowable the board has cut back production to 276,504 barrels oil per day. This is a drop of 2765 barrels from the record production allowed for August but still 2729 barrels higher than that for September 1953. In the Pembina field the normal allowable is 5633 barrels daily. Individual well allowables in the Pembina field will be based on the full field allowable, however.

All official quarters have denied a charge leveled recently by a British Columbia spokesman that Alberta province and Pacific Northwest Pipeline Corp. were setting an arrangement to "steal" British Columbia gas. Both Premier Manning of Alberta and officials of the Pacific Petroleums denied the allegation of Arthur Laing, Liberal party leader in British Columbia that any such scheme was being negotiated. Pacific Petroleums officials pointed out that no such export of British Columbia gas could be made from that province without its permission and that authority to build the necessary pipelines would have to be acquired from both Alberta and the Dominion government and that previous permits granted Westcoast Transmissions Co. would have to be revoked.

After one failure in the Kirkella area of southwestern Manitoba, Sapphire Petroleums is preparing to spud in another test nine miles to the north. The Sapphire Kirkella No. 1 tested all formations to the D2 Devonian but did not uncover commercial production. The No. 1 Sapphire Henderson will be drilled by Double A Drilling Co. near Manson, Manitoba on acreage farmed out from Standard of California.

Merrill Petroleums has paid $500 per acre for 36,320 acres in the Cold Lake Area of east Central Alberta.

One of western Canada's largest independent exploration and producing companies has purchased the refinery facilities of the largest Saskatchewan independent refinery. In the recent acquisition, Royalite Oil Co. Ltd. paid an undisclosed price for the modern 6500 barrel per day refinery of the Hi-Way Refineries Ltd. The plant is at Saskatoon, Sas. The purchase gives Royalite a total refining capacity of 17,000 barrels per day. Under a newly formed subsidiary, Royalite will push a five year expansion program in Saskatchewan and Manitoba covering exploration, development and marketing.

Field Development

Long Beach Leasing Area Growing

Keans, Springmann and Stipek, Incorporated, reported progress in the signing of subsurface oil and gas leases in the so-called "triangle" area east of Pine avenue in Long Beach. A letter from the company, recently forwarded to landowners, in part reads: "As a measure of the accord with which our proposal is being accepted we now have in our possession more than 2000 signed leases and the number is growing daily. It appears from this fact that the success of the undertaking is assured. The growing list of signers, in addition to many home owners, includes churches, apartments, hotels, banks, businesses of various kinds, some of the nation's largest corporations, realtors, lawyers and other professional and civic-minded people."

Corona Test On Calendar

North Star Mining & Development Company announces preparations to drill an interesting test well on a 300-acre lease acquired from Temescal Water Company in portions of Section 2 and 3-5s-16w, Riverside County. The property is approximately 10 miles south of Corona and in an area where a number of wells have been drilled. Some of these wells evidently showed a little high gravity oil.

Huntington Beach Well Added Flowing

Jack B. Crawford et al has completed a second flowing well at Huntington Beach for an extension of a fault block discovered last spring. The well, Huntington No. 2 on Section 11-6s-11w, started off at the rate of 525 barrels a day of 26 gravity oil. It is on the east side of Huntington Beach on Atlanta street and between Huntington and Alabama avenues. Production finds its source in the Crawford sand, a new zone in the "D" division of the Miocene formation. Crawford, 23, received his degree in petroleum geology last year from the University of Southern California.

Cascade-Aliso Wildcat Started

C. W. Teater, who entered the California oil development picture several years ago after a notable related career in Michigan, has set in motion his Teater-Wadley No. 1 wildcat well on Section 25-3n-16w in the Cascade-Aliso area of Los Angeles County. The project is no more than a quarter-mile northeast of Seaboard Oil Company's Mission Land No. 8-1 and about a half-mile east of Shell Oil Company's Mission No. 2-1. This brace of wildcats picked up shows from roughly 1200 to 7500 feet. However, conventional tests ruled off both wells as subcommercial. Teater holds 1200 acres in the area. L. B. Lytle is handling the engineering.

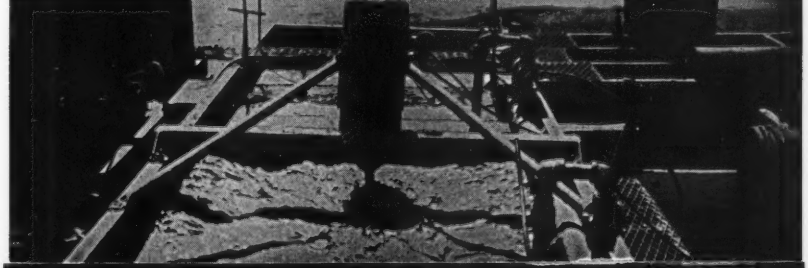
North La Habra Test Still Idle

Still idle at 890 feet was the latest report on Erin Oil Company's Freedman-North La Habra No. 1 wildcat on Section 5-3s-10w, one

ANNOUNCING

OUR NEW WAREHOUSE STOCK POINT AT TREMONT STATION, DIXON, CALIFORNIA. "IRV" LEUTHOLTZ WILL BE ON HAND TO SUPPLY YOUR MUD NEEDS DAY OR NIGHT FROM A COMPLETE LINE OF CHEMICALS, MAGCOBAR, AND MAGCOGEL.

"IRV" LEUTHOLTZ **PHONE RIO VISTA 4-0813**



BROWN MUD COMPANY

MAGCOBAR DEALER

DIXON	VENTURA	LOS ANGELES	BAKERSFIELD
RIO VISTA 4-0813	Miller 3-8168	WEbster 3-5618	FAirview 2-6410

Johnston Stainless Welding Rods

PROVEN QUALITY SINCE 1931

•

A. P. JOHNSTON

1845 E. 57th St. - Los Angeles 11, Calif.

mile north of La Habra and one and one-half miles south of Sansinena production. The venture explored to a total depth of 8750 feet.

Kraemer Test Quits Drilling

Operations have come to a permanent halt at 6158 feet with Shell Oil Company's Shell-Travis No. 1 wildcat on Section 36-3s-9w in the Kraemer area of Orange County. Nothing exciting was reported on the way down. The company's core hole campaign at Yorba Linda has been punctuated in recent days by the abandonment of Core Hole J on Section 16-3s-9w at 4911 feet, after fish was recovered to 4308 feet. Core Hole K on the section is digging near 1000 feet.

Seal Beach Test Holds Attention

Awaited with considerable interest from both within and outside the petroleum industry are results of final tests with Monterey Oil Company-The Texas Company tideland explorer one and one-half miles offshore from Seal Beach. Casing apparently has been run as a prelude to exhaustive tests. The project bottomed at 10,162 feet, but has been plugged back to an undisclosed level. At the initiation of the wildcat, a depth between 8000 and 9000 feet was expected to tell everything wished to be known from a production standpoint. The well, on a clever man-made island, is designed to accommodate the drilling of three wells.

Sierra Pelona Wildcat Drilling

Gas showings are reported accompanying drilling of James R. Saul's Germaine No. 1 wildcat on Section 19-5n-13w in the Sierra Pelona area, Los Angeles County. The venture as this is jotted down is nearing the 1000-foot level.

Riverside Wildcat Encounters Granite

Encounter with granite resulted in abandonment at 1068 feet for Clifford A. Robinett's Pinkerton No. 1 test on Section 3-3s-7w in the Narco area of Riverside County. Near Corona, Frank Pethyridge and Lou W. Erlich, rather than deepening their Ciroco Wright No. 1 test on Section 33-3s-7w, are redrilling the well at a depth last reported in the neighborhood of 1200 feet. The project the first time down went to 1516 feet. Al Godfrey Drilling Company's Botiller No. 1 wildcat on Section 29-3s-7w is being deepened to a scheduled 4000 feet from 2750 feet.

Carbon Canyon Listed For Test

Douglas Marcell, who has been developing oil in California for more than 20 years, is preparing to drill a wildcat well designated as Puente No. 1 and located in Section 31-2s-8w at Carbon Canyon in Los Angeles County. Drilling contract has been let to Santa Fe Drilling Company.

Mutau Flats Test Listed

Marvel Oil Company of Billings, Mont., has entered California by staking location for its Cuyama-Piru No. 1 on Section 28-7n-21w in the Mutau Flats area of northern Ventura County. The drill site is surrounded by leases of 9000 acres acquired from W. Scott Russell and Arthur Crites. Some 6000 acres are held in addition to that leased to Marvel by the Russell-Crites interests. If drilling at this location should uncover something new the northeast end of Cuyama Valley would be opened up to fresh development. The Marvel location is about one-half mile north of a well drilled many years ago by Fred Howard, Charles Barnard and Slocum Brothers on a Government placer claim. This project was credited with showings but due to mechanical troubles and lack of adequate financing was abandoned. The Texas Company and Intex Oil Company are acreage holders in the general area as are a number of other important operating organizations.

Moorpark Wildcat Drilling Steadily

Drilling has reached close to 4000 feet in Robert S. Lytle's Williams No. 1 explorer on Section 33-3n-19w at Moorpark in Ventura County. Terminal Drilling Company is taking the well down. George Roth is handling the engineering.

Oxnard Adds New Producer

The ranks of Oxnard producers have been increased by Standard Oil's Lenox No. 31 which opened the show at a plugged depth of 7770 feet with 350 barrels of 25 gravity oil a day through a 16/64-inch choke. The well explored to 10,522 feet and then backed up for tests at the higher level. Oxnard, long satisfied to produce from shallow zones, is on the way to increasing importance as wells from the deeper sands come in. A check of new wells in the last year or two denoted that every production endeavor bears a different hue from every phase. The Lenox, for instance, is reported tapping from a zone unlike that open in the nearby McInnes No. 1 well.

Ventura County Wildcats Suspended

For a time at least three wildcat wells in as many different Ventura County sectors have suspended operations. James Jansen's Jansen No. 1-27-S on Section 27-4n-21w at Santa Paula Canyon stopped at 3720 feet. George Allen's Teddy No. 1, Section 5-1n-17w, Canoga Park, is inactive at 1500 feet. In the Santa Susana area, Pamoan Oil Company's Flanagan No. 1 on Section 5-2n-17w is standing still at 2725 feet.

Ojai Well On For Little Oil

Net oil production at last reports amounted to no more than a half-dozen barrels a day from Honolulu Oil's Honolulu-Sunray-Dunshee No. 1 exploratory hole on Section 28-4n-24w at West Ojai. The project logged 7594 feet, before plugging back to 2814 feet.

Lodi Wildcat Off The Board

Calaveras Cement Company's Lippert No. 1 on Section 27-4n-6e in the Lodi area of San Joaquin County has been abandoned at a total depth of 411 feet. It was drilled near the Lodi terminus of the natural gas pipeline to the company's cement plant at Calaveras. The project was taken down for the cement organization by Bishop Oil Company of San Francisco, which holds a one-sixteenth interest. Further development work in the area may be undertaken after geological information is studied to determine whether drilling on other sectors on the company's leases totaling 3800 acres is advisable.

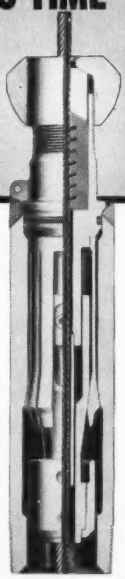
Rumsey Hills Test Abandoned

Taps have been sounded for Shell Oil Company's Kingsbury No. 4X-11 on Section 11-11n-3w in Yolo County's Rumsey Hills. The well was taken down to a total bottom of 5500 feet, before it was plugged back for additional tests above 2750 feet. The final efforts evidently were wet. Monterey Oil Company has a wildcat going in the earlier stages in the Dunnigan Hills area. It is Clover No. 1 on Section 19-11n-1e.

Beehive Bend Adds New Gas Discovery

Richard S. Rheem, Operator, has boosted gas supplies in Glenn County with a discovery in the Beehive Bend area. This all came to pass by

REDUCE
BAILING and SWABBING TIME
with the
BOWEN AUTOMATIC LINE WIPER



THE BOWEN AUTOMATIC LINE WIPER is an inexpensive tool that will quickly "pay out" its cost by increasing efficiency and reducing time spent on bailing or swabbing work. With this completely automatic unit you can...

...KEEP THE WIRE LINE CLEAN
...PREVENT GAS AND FLUID LEAKAGE
...MAINTAIN A DRY and SAFE RIG FLOOR

No special attention is required for operation. When pulling out, the packer seals off tightly around the wire line, keeping gas and fluid inside the casing—not on the rig floor. **AND NO AMOUNT OF PRESSURE CAN BLOW IT OUT!** Yet, when struck by the outcoming rope socket, it releases instantly and rides out on top, relocking in the body automatically when the tools are lowered again. No unlocking... no resetting... and no need to "flag" the line.

The Bowen Line Wiper is available in sizes for all commonly used drill pipe and tubing connections. Order yours today!

SR BOWEN CO

MAIN OFFICE AND PLANT:
11008 SOUTH NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
EXPORT OFFICE:
50 ROCKEFELLER PLAZA
NEW YORK CITY, NEW YORK
EXPORT REPRESENTATIVE: VAL R. WITTICH, JR.

Just Say---

YES! You may send me the CALIFORNIA OIL WORLD for one year, for which I enclose $1.00.

Name.....

Address.....

City.....State.....

Position.....Company.....

Check branch
engaged in Producing..... Refining..... Natural Gasoline.....
Marketing..... Manufacturing.....

Subscriptions accepted only from persons actively connected with the oil industry.

CALIFORNIA OIL WORLD
2404 W. 7th St., Los Angeles 57, Calif.

performance of Zumwalt No. 1-63 wildcat well on Section 2-19n-2w, or two and one-half miles northwest of the Beehive Bend gas field. The well on conventional tests showed 7,000,000 cubic feet of gas a day through a quarter-inch bean. It may be that this project came across a sand measure different from that encountered in General Petroleum Corporation and the Sunray Oil Corporation producers in the Beehive Bend field proper.

Petrolia Test Now Only History

As an aftermath of a final test of the interval of 2563-2615 feet which showed nothing, Richfield Oil Corporation has pulled out of its Graham No. 1 wildcat well on Section 30-1s-2w at Petrolia in Humboldt County. Brookline Oil's Caesar No. 1 test on Section 15-1s-2w is being prepared for a return to production at 2873 feet, following cleanout activities. West Coast Oil's West Coast No. 1 wildcat, Section 21-1s-2w, will drill ahead from 1974 feet as soon as cleaning out is finaled.

Martinez Test Drilling Ahead

Three miles south of Martinez in Contra Costa County, Newton Drilling Company is taking down on contract Lightning Gas & Oil Company's Almond No. 6 gas test on Section 31-2n-2w. The area generally already has been the scene of six other tests, which all showed some gas, but in subcommercial quantities.

Huasna Wildcat 10,000-Foot Test

Standard Oil of California's interesting Jessup No. 1 exploratory well starting on Section 18-32s-15e in the Huasna area of San Luis Obispo County probably will go to at least 10,000 feet for an exhaustive test at that location. K. L. Kellogg Drilling Company is in charge of the drilling chores.

Elwood Well Goes On Pump

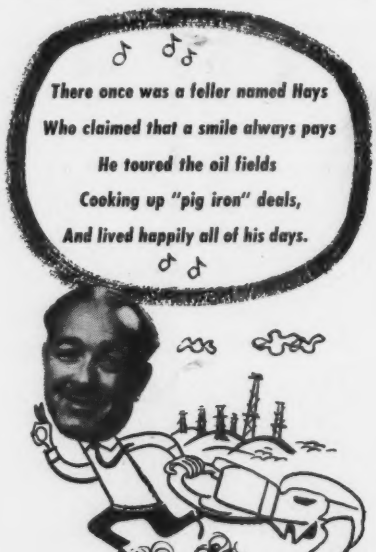
Pacific Western Oil Corporation's Blue Goose No. 93-12 well in the Elwood field in Santa Barbara County was last reported pumping all water. Total bottom is 4401 feet, with bridge plug at 3900 feet. The drill site is on Section 16-4n-29w.

Kirby Hills Area Tests Unproductive

Two test wells in Solano County have gone off the board. Trico Oil & Gas Company abandoned Blacklock No. 2 on Section 19-4n-1e at Kirby Hills at 5564 feet. Shell Oil Company took the same action with its McCormack No. 1 on Section 1-4n-1w in the North Kirby Hills area at 5300 feet.

Belgian Anticline Followup Drilling

Ohio Oil Company is drilling beneath 3000 feet with its F. E. Smith No. 2 on Section 23-30s-21e, a westerly offset to its F. E. Smith Government No. 1 pool discovery in the Belgian Anticline area. The No. 1 was completed at a total depth of 5810 feet from Oceanic sand for an initial output of 1042 barrels of 32.9 gravity oil and 538,000 cubic feet of gas a day. In use was an 18/64-inch orifice. Casey & Montgomery is contractor on both jobs. Pacific Western Oil Corporation is ready to drill an offset to the Ohio discovery. The well is named Anderson No. 62-A and is on the discovery section.


There once was a feller named Hays
Who claimed that a smile always pays
He toured the oil fields
Cooking up "pig iron" deals,
And lived happily all of his days.

And what kind of "pig iron" was he selling? Why Web Wilson HYDRA HOOKS, Tongs, Elevators, Slips and Links. ★ But the biggest smiles in the Valley were from his customers who use TIGER TOOTH Tong Dies, the kind that DO GRIP and WON'T SLIP even on hardened wear subs or tool joints. ★ Wally Hayes is one of "Big Ed" Plaugher's boys, and a mighty easy fellow to get acquainted with. Call Bakersfield 2-2376, and he'll come a smilin'.

Mount Poso Test Slated

Wilrich Development Company is ready to take down its Gill No. 5 on Section 24-26s-27e in the Mount Poso area, 200 feet from Intex Oil Company's Gill No. 2 discovery of small yield. Wilrich recently abandoned its Gill No. 4 on the section at 2135 feet.

Bellevue Wildcat Quits at 8700 Feet

Moriqui Exploration Company's Ricards Bros. 17-26 explorer on Section 26-29s-26e quit at 8700 feet without test. Located in the Bellevue area of Kern County, the project topped the Stevens zone at 6728 feet. In the Sand Hills area, General Petroleum Corporation also has pulled out of its S.P. Tejon No. 16-3 wildcat on Section 3-11n-19w. Nothing worthwhile came to light to a bottom of 11,963 feet.

Ten Section Test Deeper

At last reports Intex Oil Company was nearing objective depth of 8000 feet with its KCL No. 76-28 test on Section 28-30s-26e on land east of the Ten Section field. The well is looking for production in the Stevens sand, a zone producing in the Ten Section field proper.

Dagany Gap Well Spuds In

Gilliland Oil Company as operator has begun drilling its Miller Unit No. 8 on Section 3-25s-18e in the Dagany Gap field. Location has been staked for Miller Unit No. 9 on Section 10-25s-18e. West of the Devils Den field, D. E. Brannan's Kerry No. 1 wildcat on Section 28-25s-18e has been abandoned at 1498 feet.

Tunis Creek Test Drills

Loyd Wright is several hundred feet below grass roots with his No. 85-31 wildcat on Section 31-11n-18w or one and one-half miles south and

Going down— three miles . . .

Some oilmen analyze the rocks. Some survey the land. Some listen for shocks deep in the earth. But nobody knows there's oil for sure until the drill itself has found it. That's why some say the driller's job is best — he's the first to *see* what all are searching for. He's got to be strong, brainy, able to fit into a smooth functioning team — the drilling team. For that is what it takes to start the flow of crude that ends up in fine Texaco products for marketing in all 48 states.

The Texas Company

TEXACO

west of production in the Tunis Creek field. Drilling & Production is taking the project down. Engineering is in the hands of Robert Mangold.

Lost Hills Well Pumping

The Texas Company's new well on wildcat ground in the Northwest Lost Hills area is pumping only a few barrels of oil from 3278 feet. Known as Overall No. 2, the well is on Section 33-25s-20e. The company's KCL-Parallel NCT-1 No. 1 test on Section 36-28s-24e and west of the Rio Bravo field is making hole well below 10,200 feet.

Cuyama Valley Project Redrilling

Aeco Corporation has backed up and plugged around 5100 feet and is redrilling to the Dibblee zone for a test of this sand in its Aeco-British American Shell No. 1 wildcat on Section 13-11n-28w, San Luis Obispo County. The project, two miles north of the Russell Ranch field and the same distance southeast from the Morales field, passed up a test of the Dibblee on the way down to a bottom of 6629 feet. On the first test of the interval of 6365-6510 feet in the Soda Lake zone, the project evidently displayed some 90 feet of oil together with drilling fluid and water cushion. It was estimated from recovery that the well at that point was good for somewhere between 20 and 50 barrels of oil daily. A second test from 6510 to 6626 feet occasioned little interest and gave notice that the zone was dense and impermeable and not likely to produce. The third and terminative test of the Soda Lake was conducted in the interval of 6396-6626 feet. It was officially described as showing 200 feet of clean 39 gravity oil along with an admixture of other fluids. Even though the third test took in zone previously put to trial, a review of developments by all interested parties concurred that a half-hundred barrels a day was about all that could be anticipated from the Soda Lake. This decision prompted the redrill to the Dibblee. C. W. Colgrove's Russell No. 33-5 wildcat on Section 5A-10n-26w is drilling at 3000 feet. Richfield Oil Corporation has reached 2800 feet with its Hibberrd No. 112-6 on Section 6-9n-26w and is drilling on down.

SMITH-EMERY CO.
Chemists—Engineers
Established 1910
Metals—Oils—Waters
Analyzed and Tested
Shipments Certified
Tanks Strapped
781 E. Washington Blvd.
Los Angeles 21, Calif.
Member
American Council of Commercial Laboratories

Santos Creek Wildcat Fails

Bottomed at 4182 feet in barren Point of Rocks formation, Drilling & Production Company has pulled out of its Trico No. 71-32 wildcat on Section 32-28s-20e in the Santos Creek area of Kern County. Intex Oil, Norris Oil and Trico Oil held stakes in the play. Adjoining lands were held by M J M & M Oil, Superior Oil and Mohawk Petroleum. The drill site fell about one-half mile north of Norris' CCMO No. 86X, abandoned at a redrilled depth of 3653 feet last January. The first time down the project went to 4023 feet.

Northwest Trico Wildcat Drilling

Drilling has just been initiated in Corwin Drilling Company's McCracken No. 1 wildcat test on Section 4-24s-22e, northwest of the Trico gas field in Kings County. The Corwin effort is primarily directed toward the Mya zone around 2800 feet. The W. W. Holmes, Operator, C. & G. No. 1 wildcat on Section 5-24s-22e in the Alpaugh area is still a location.

Flint Hills Wildcat Staked

Tide Water Associated Oil Company is preparing to put down Breen No. 3 project on Section 19-12s-5e in the Flint Hills area of San Benito County. This well replaces the Friis No. 1 location on Section 18, which has been given up. Near Hollister, Rheem-Balken-Krug's Jacques No. 1 prospect job on Section 20-12s-5e has been abandoned at 5232 feet in basement rocks.

Lanare Wildcat Digging On Down

One and one-half miles southeast of production, Lane Petroleum Company's Benadom No. 1 wildcat well 7300-foot test on Section 29-17s-19e in the Lanare area of Fresno County continues to drill ahead under 2500 feet. Standard Oil's No. 423-34J test on Section 34-21s-17e at North Kettleman is drilling at an intermediate stage, with San Joaquin Drilling Company in charge.

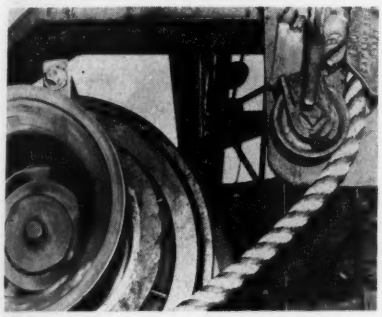
Kettleman Hills To Be Wildcatted

Bolsa Chica Oil Corporation has made known that in the near future it will share in a new exploratory effort to uncover production at Kettleman Hills Middle Dome in Kings County. Standard Oil of California owns 75 per cent of the proved land in the area and Bolsa 25 per cent. A well under that banner should be on the way before November. It will be remembered that Standard opened the Temblor pool at Middle Dome in 1932 with a wildcat which spewed some 1100 barrels of 53 gravity oil and more than 27,000,000 cubic feet of gas a day from a total depth of 8386 feet. Sometime thereafter, the well registered a new disposition by going to all water and subsequently into discard. The Standard-Bolsa combine drilled a test in 1947 and another in 1949, the last work in this category in the area. These two wells are showing an enduring flow, but water with the oil still is an unsolved problem. The new wildcat probably will call for an expenditure of many thousands of dollars, in fact it is on the budget for $668,000. Location has been chosen on Section 19-23s-19e for the test, which is destined to a trip to between 12,000 and 13,000 feet. The 1947 explorer, incidentally, topped the Eocene at approximately 12,070 feet.

PETROLEUM SAFETY ENGINEERS— Must have 2 years experience accident prevention or safety engineering in oil field or refinery OR 3 years general engineering experience in field or refinery. College degree in engineering or geology also required. Additional experience may be substituted for degree. Write Dept. OW, State Personnel Board, 1015 L Street, Sacramento 14. 9/30b

New BJ Roller Type Cat-Line Grip

A new Roller Type Cat-Line Grip which combines all the safety features of the BJ Standard models, but also provides a special sheave for added cat-line control, is announced by Byron Jackson Co. This special sheave acts as a guide to give additional control in threading through the cat-line grip.



All BJ Cat-Line Grips embody an all-steel safety device which securely holds the cat-line at any desired point and eliminates the possibility of accidents and burned cat-lines caused by slipping of the cathead.

The line can be inserted or removed instantly through a side opening without threading through the grip. A positive safety latch prevents accidental removal of the line. The eccentric cam wedge is shaped to the contour of 1½" rope and designed with dull teeth which take a positive grip without damaging the cat-line.

Both Roller Type and Standard Models are designed to take 6000 lbs. working load with a 4 to 1 safety factor. Available in right-hand or left-hand grips. Byron Jackson Co., P.O. Box 2017, Terminal Annex, Los Angeles 54, California.

Marin Co. Appointed Distributor for Grover Air Horns

Organization of The Marin Company as a national distributor of Grover air horns and allied equipment has been announced by Richard P. Casterline, President. Grover air horns are used as safety signaling, or warning devices in oil fields, oil refineries, manufacturing plants, and on trucks and oil tankers.

Eighteen models are now available, from single horns 7½" long to two-way horns 47" in length. Also available are several types of three-way, four-way, and eight-way horns. All Grover air horns operate equally as well on gas, steam, butane, CO_2, or any gaseous pressure. Main feature of the horns, is that due to their great power, they can be heard in noisy or congested areas.

Grover air horns were widely used during World War II for civil defense, as air raid signals. They have been tested by and exceeded the standards set-up by the Warning and Communications Division of the FCDA in their Performance Specifications for air horns.

Air horns are used for such common purposes as calling certain individuals to the telephone in noisy plants, oil fields, or large outdoor or indoor areas; for indicating starting time, lunch, quitting time, or change of shifts; to serious purposes, such as, air raids, fires, floods, disasters of any nature; and as safety devices to warn before trouble occurs on drilling rigs, machinery, trucks, etc. Through a system of short and long blasts, sound can be coded to mean definite warnings or signals to action.

Since air horns have the power to be heard from ½ mile to several miles under normal conditions, the following should be considered when making an installation: Distance the sound will travel is dependent upon the length of the horn and local noise conditions. Obstructions such as walls or trees also effect the sound coverage.

Grover air horns operate in fog or rain. They are self-cleaning at every blast, and can even operate when filled with water. Most of the models are made of spun brass, lacquered. One model for indoor use is made of chemically treated aluminum. The largest model is made of cast bronze.

Tone of the horn varies according to its length. The shortest horn has a high-pitched, penetrating sound. Other horns in progressively longer lengths produce middle-pitched, commanding sounds; low-pitched, demanding sounds; lowest-pitched, demanding sounds; and the longest model, a deep roar.

An engineering service is offered without charge to adapt Grover air horns to any special warning purpose, or to assist in recommending units to cover specific areas.

Further information may be obtained by writing to The Marin Company, 2414 East 57th Street, Los Angeles 58, California.

Louis had been asked to dine at the home of his teacher, and was drilled by his mother on good manners. When he returned home, she asked him how everything had gone. Louis assured her that there was "nothing to speak of."

"Then something did happen!" his mother insisted.

He admitted that when he was trying to cut the meat it had slipped off his plate onto the floor.

"Well, what did you do?" his mother asked.

"Oh," he explained, "I just said, kinda casual like, 'that's always the way with tough meat.'"

A little boy peered over the edge of the counter of the stationery department of a dime store.

After fidgeting a moment, he asked hopefully of the clerk, "Miss, do you have any blank report cards?"

THIS

LAUGH OFF!!

"Golly, that little brother of mine drives me crazy!" Gwen complained.

"What do you mean, dear?" her mother asked gently.

"Well," she explained, "I just happened to mention that I was studying to become a librarian. Now he tells everybody I'm going to be a lady bookie."

One of the little boys in the neighborhood was always very dirty. The particular woman who lived next door to him was a very neat, proper person, and it always distressed her to look at Jimmy.

"Did you take a bath today?" she asked one day.

"No, Ma'am," he answered. "Why, is one missing?"

Marvin was crying because his sharp-toned aunt had scolded him again.

"Why, she scolds me so bad," he said, "you'd think I was her husband."

When Arthur's mother saw him about to hit his little playmate on the head with the butt of his toy pistol, she ran to him, and scolded him sharply.

"But what else could I do?" her son replied, sharply. "I shot Tommy, but he wouldn't fall down."

Two little girls were walking through the park, when suddenly they stopped at the stork's cage.

"I wonder why he keeps one foot raised up?" one of them asked.

"Oh, don't be silly," her little friend laughed. "If he raised the other foot, he'd fall down."

A beggar stopped an elderly lady on the road and asked her for some money.

The woman chided, "Do you really like walking the streets and begging?"

The man thought a moment and then said solemnly, "You know, sometimes, I do wish I had a car."

Ronald, 6, and Raymond, 8, were hesitant about asking their mother's permission to go to the show.

"You ask," Ronald said.

"No, you," Raymond insisted.

"But," Ronald persisted, "you're older. You've known her longer than I have."

FOR

24 Hour

Oil Field Equipment Service!

Exclusive West Coast Distributor for...

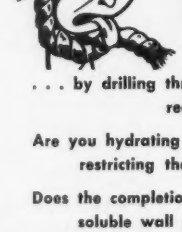
Wilson POWER RIGS and WINCHES

DISTRIBUTORS FOR
GAS AND DIESEL ENGINES
OIL FIELD TOOLS AND SUPPLIES

SPECIALIZED SHOP WORK
REMODELING AND REPAIR OF RIGS

USED RIGS
AND
RENTALS

POWER RIG & EQUIPMENT CO., INC.
3001 Cherry Ave., Long Beach 7, Calif.
Phones: Long Beach 407935 or ZEnith 3851 (Toll free)
Bakersfield Office: 3910 Pierce Rd., Phone FAirview 59436
Ventura Office: 1254 No. Ventura Ave., Phone Miller 39046



ARE YOU CHOKING

production . . .
. . . by drilling through your oil sand with muds which reduce its permeability?

Are you hydrating silts and shales in your oil zone and restricting the flow of oil to the well bore?

Does the completion mud you now use deposit a poorly soluble wall cake and plaster-off production?

IF SO you should know about ANDRITE

the oil base drilling fluid successfully used in hundreds of California well completions in low-pressure, partially-depleted and dirty oil sands.

ANDRITE is a product of the

CALADA MATERIALS COMPANY

3501 Dock St., Terminal Island
LONG BEACH, CALIFORNIA (PHONE 7-9086)
Bakersfield Distributor GROVER COLLINS - Phone 3-7691